

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7449

Investigation Into Vermont Electric)
Cooperative, Inc.'s 2008 Integrated Resource)
Plan)

Order entered: 7/31/2009

**ORDER APPROVING TRANSMISSION AND DISTRIBUTION PORTION
OF INTEGRATED RESOURCE PLAN**

I. INTRODUCTION

This Docket is an investigation of Vermont Electric Cooperative, Inc.'s ("VEC") Integrated Resource Plan ("IRP") that was filed on July 1, 2008. On May 15, 2009, VEC filed a Memorandum of Understanding between itself and the Vermont Department of Public Service ("DPS") regarding the transmission and distribution ("T&D") portion of VEC's IRP ("T&D MOU"). In this Proposal for Decision, I recommend that the Public Service Board ("Board") approve the T&D MOU and the T&D portion of VEC's IRP, as modified by the T&D MOU. In addition, I recommend that the Board require VEC to file the required updated Capital Improvement Plans ("CIP") and vegetative management plan with the Board as well as the DPS.

II. PROCEDURAL HISTORY

On February 14, 2008, VEC filed the power supply portion of its IRP. On July 1, 2008, VEC filed its complete IRP, including the transmission and distribution portion. I am admitting VEC's July 1, 2008, IRP into evidence in this proceeding as exhibit VEC-1.¹

Also on July 1, 2008, VEC filed: (1) one-line diagrams showing VEC's transmission system; and (2) a report entitled "Vermont Electric Cooperative, Inc. – Transmission and

1. In this Proposal for Decision, I am admitting exh. VEC-1 through VEC-5 and exh. Joint-1. Any party wishing to object to the admission into evidence of any of these exhibits should so do in a motion for reconsideration of this Order.

Distribution System Condition Assessment Report" that was prepared for VEC by MPR Associates, Inc. (hereinafter the "SCA"). Both these documents are referred to in VEC's IRP. I am admitting both documents into evidence in this proceeding as exhibits VEC-2 and VEC-3, respectively.

On July 29, 2008, the Board opened an investigation into VEC's IRP and appointed me as Hearing Officer.

On August 11, 2008, I held a prehearing conference in this proceeding. On August 13, 2008, I issued a prehearing conference memorandum attached to which was a list of questions based on my initial review of VEC's IRP.

On September 3, 2008, VEC filed responses to my questions. I am admitting these responses into evidence as exhibit VEC-4.

On September 12, 2008, the DPS filed a letter in this proceeding as well as several other dockets in which other electric utilities' IRPs were being reviewed. In this letter, the DPS proposed that review of the power-supply portions of currently pending electric utility IRPs be suspended for a period of time to allow the DPS to initiate discussions with utility personnel aimed at streamlining review of IRPs and ensuring that they provide value to the utilities and their ratepayers. The DPS stated that it would continue its review of the T&D portions of the pending IRPs.

I subsequently issued several scheduling orders granting VEC's and the DPS's requests for extensions of time for negotiations related to the T&D portion of VEC's IRP.

On February 23, 2009, the Board held a public hearing in this docket in conjunction with Dockets 7488 and 7489, investigations into VEC's proposed rate increase and proposed alternative regulation plan, respectively. The public hearing was held using Vermont Interactive Television sites in Johnson, Newport, St. Albans and Williston. Six members of the public spoke at the public hearing, most of whom focused their comments on VEC's proposed rate increase. However, since VEC's CIP was one of the significant drivers of the proposed rate increase, the public comments about the state of VEC's physical infrastructure and whether such a large increase was needed now are relevant to issues included in VEC's IRP. In addition, one

commenter asked about VEC's power supply planning and smart metering implementation, issues that are addressed in VEC's IRP.

The Board received dozens of written comments opposing VEC's proposed rate increase, some of which discussed whether it was necessary to make the proposed improvements to VEC's physical infrastructure as quickly as VEC had planned. In addition, a few of those public comments specifically referenced the Board's investigation into VEC's IRP. Some of those comments asked the Board to reject the IRP (along with the proposed rate increase and the proposed alternative regulation plan), while others expressed support for the IRP.

After an extended period of negotiations with the DPS regarding the T&D portion of VEC's IRP, on May 15, 2009, VEC filed the T&D MOU. I am admitting the T&D MOU into evidence as exhibit Joint-1.

On June 8, 2009, I sent the parties questions regarding the T&D MOU, and established a deadline for parties to file any objections to the admission of the responses to my questions into evidence in this proceeding.

On July 2, 2009, VEC filed responses to my questions. On July 7, 2009, the DPS filed a letter stating that it had no objection to the admission into evidence of VEC's responses to my questions. Accordingly, I am admitting VEC's July 2, 2009, responses to my questions into evidence as exhibit VEC-5.

Also on July 7, 2009, the DPS filed responses to my questions in the form of prefiled testimony by Mr. Ron Behrns and Mr. W. Steven Litkovitz. No party filed an objection to the admission of this prefiled testimony into evidence. Accordingly, I am admitting into evidence the prefiled testimony of these two witnesses.

Based on the evidence in this Docket, I hereby report the following findings and conclusions to the Board in accordance with 30 V.S.A. § 8.

III. FINDINGS

Condition of VEC's T&D System

1. The VEC system has suffered from a significant under-investment in both capital infrastructure and operations and maintenance expenditures for many years resulting in a system with serious reliability and safety shortfalls. Litkovitz pf. at 2.
2. The most dramatic and unfortunate manifestation of these reliability and safety shortfalls occurred in September 2006 when a VEC employee was seriously injured while performing a switching operation at the VEC Richford substation. Litkovitz pf. at 2.
3. MPR Associates, Inc.'s 2006 independent investigation into a 2006 accident at VEC's Richford substation ("MPR Report") identified 14 corrective actions, including the need to correct potential system design and operational deficiencies in VEC transmission and distribution systems. Exh. VEC-1 at 4.
4. Stone and Webster Management Consultants' 2007 Business Process Review and Audit of VEC ("BPRA") found that VEC suffered from a long maintenance backlog and its system condition was below industry average. The BPRA also found that the VEC system was deteriorating rather than improving, and that system reliability was suffering. Litkovitz pf. at 2-3.
5. The BPRA recommended changes to VEC's organizational structure, operational, engineering and planning practices, and its management philosophies. The BPRA also recommended that a detailed and systematic assessment of VEC's plant be performed. Litkovitz pf. at 3; exh. VEC-1 at 5.
6. The SCA provided VEC with an independent opinion of the current condition of its assets as well as information and recommendations regarding future upgrades and maintenance necessary to ensure the operational safety and reliability of those systems. The SCA appropriately prioritized safety-related projects such as substation projects, the replacement of the Derby to West Charleston line, and the upgrading of switching equipment on the 46 kV system. Litkovitz pf. at 4; exh. VEC-1 at 5; exh. VEC-3, *generally*.

7. Many of the most immediate safety concerns identified in the SCA concerning substation grounding, fencing, signage, and clearances have already been addressed by VEC through small capital projects and maintenance activities. Litkovitz pf. at 4.

8. Vermont Electric Power Company, Inc.'s ("VELCO") 2007 planning study that focused on VEC's Highgate to Newport and Irasburg 26 kV system ("VELCO Study") identified areas for additional capacitor bank installations to provide optimal voltage support during steady state and post contingency conditions. Exh. VEC-1 at 5.

VEC's IRP

9. VEC's IRP includes base, high and low 20-year energy and peak demand forecasts. Exh. VEC-1 at 3-1 to 3-18.

10. VEC's IRP includes four energy efficiency savings forecasts. Exh. VEC-1 at 2-9 to 2-10, 3-16 to 3-18, and A-13 to A-17.

11. VEC's IRP includes information regarding VEC's current supply resources and the resource gap that GMP foresees in the future. Exh. VEC-1 at 4-19 to 4-25.

12. VEC's IRP includes information regarding the analyses VEC performed and portfolio options it considered to meet its future power supply needs. Exh. VEC-1 at 2-1 to 2-14, 5-1 to 7-10.

13. VEC's IRP discusses the current condition of VEC's transmission and distribution system and includes a Ten-Year Capital Improvement Plan and a Ten-Year Strategic Capital Work Plan ("Capital Work Plan"). Exh. VEC-1 at 8-1 to 9-48, and exhs. 11.3.1 and 11.3.2.²

14. There were several major inputs to the T&D portion of VEC's IRP, including: the MPR Report; the BPRA; the SCA; and the VELCO Study. Exh. VEC-1 at 4 to 5, and 8-5; exh. VEC-3.

15. VEC's Capital Work Plan prioritizes capital projects to be completed over the next ten years. The Capital Work Plan focuses first on the safety and operability of VEC's system, proposing projects that first correct deficiencies on its 46 kV system. The second phase of the

2. The Ten-Year Capital Improvement Plan and the Capital Work Plan are labeled in VEC's IRP as exh. 11.3.1 and exh. 11.3.2, respectively.

Capital Work Plan focuses on upgrading aging substation infrastructure and accommodating increased load demand. Exh. VEC-1 at 6 and exh. 11.3.1.

16. The Capital Work Plan includes the cost of all of the MPR Report's recommendations for capital improvements, other than those that have already been implemented. Exh. VEC-4 at 5.

17. Substation remediation activities identified in the SCA that are not specifically identified in the Capital Work Plan will be funded from VEC's budget for small substation projects, which VEC plans will be one million dollars annually. Exh. VEC-4 at 4-5.

18. VEC's IRP includes a description of its vegetation management program. The IRP states that VEC has a long-term target of attaining a five-year vegetation management cycle on transmission rights-of-way, and a seven to ten-year cycle on distribution rights-of-way. Exh. VEC-1 at 10-3 to 10-6.

19. VEC's IRP includes a Demand-Side Management Action Plan, a Supply Resource Action Plan, and a T&D Action Plan for implementing the conclusions identified through its IRP analysis. Exh. VEC-1 at 2 to 4, 6 to 7, and 11-1 to 11-15.

T&D MOU

20. The T&D MOU provides that VEC's T&D CIP will include the projects set forth in Attachment 1 to the T&D MOU, and that VEC will make all reasonable efforts to complete all projects in this CIP within the times shown. Exh. Joint-1 at 2.

21. VEC does not have the capital necessary to immediately undertake all of the BPRA's and SCA's recommendations and therefore has adopted a reasonable timeline to implement the recommendations. Behrns pf. at 2.

22. VEC has proposed to raise additional capital from members via an increase in its Times Interest Earned Ratio ("TIER").³ The additional equity would be leveraged and used as a basis for securing additional long-term debt. In raising this additional capital (debt and equity), VEC will maintain its existing debt/equity ratio and its corresponding credit metrics. Behrns pf. at 2.

3. In a separate Order issued today in Docket 7488, the Board has approved VEC's request for an increased TIER, subject to certain conditions contained in a settlement agreement in that proceeding.

23. The increased level of capital spending required to implement VEC's T&D CIP is not likely to result in financial difficulties for VEC as long as a reasonable debt/equity ratio is maintained. Behrns pf. at 3.

24. VEC is facing challenges in managing its proposed CIP. Litkovitz pf. at 5.

25. Under the terms of the T&D MOU, VEC will provide an updated CIP annually to the DPS no later than February 14 of each calendar year until VEC files an updated IRP with the Board and the DPS. Exh. Joint-1 at 2.

26. Under the terms of the T&D MOU, VEC will develop, and provide to the DPS no later than September 1, 2009, a vegetative management plan that places VEC's distribution system on a trimming cycle of no greater than eight to ten years. Exh. Joint-1 at 2.

27. The T&D MOU provides that the T&D section of VEC's IRP, as modified by the T&D MOU, may be approved by the Board pursuant to 30 V.S.A. § 218c(b). Exh. Joint-1 at 2.

28. The T&D MOU provides that approval of the T&D section of the IRP will constitute approval of the decision-making process described in that section of the IRP only, and will not constitute approval of any of the specific decision-making tools, analytic methods, or outcomes described. Exh. Joint-1 at 2.

29. Under the terms of the T&D MOU, approval of the T&D section of VEC's IRP will not relieve VEC of its ongoing duty to:

- monitor key uncertainties and the continued accuracy of assumptions and data in the IRP;
- continue to reevaluate the merits of the decision-making processes, including but not limited to the analytic methods used, and to adapt such processes to new techniques or information; and
- continue to reevaluate the merits of its decisions.

Exh. Joint-1 at 2-3.

30. The T&D MOU provides that the term of VEC's IRP began on July 1, 2008, and will extend through December 1, 2011. Exh. Joint-1 at 3.

31. The T&D MOU provides that VEC will file its next IRP on or before December 1, 2011. Exh. Joint-1 at 3.

IV. DISCUSSION

30 V.S.A. § 218(c) sets out the statutory standard that VEC's IRP must meet. Section 218(c) describes a "least cost integrated plan" as:

a plan for meeting the public's need for energy services, after safety concerns are addressed, at the lowest possible present value life cycle cost, including environmental and economic costs, through a strategy combining investments and expenditures on energy supply, transmission and distribution efficiency, and comprehensive energy efficiency programs.⁴

The statute provides that the Board may approve a company's least-cost plan if it complies with the requirements of this definition.

Even though VEC's IRP addresses the multiple areas identified in the statute, this Proposal for Decision focuses only on the T&D portion of VEC's IRP and makes no recommendation regarding the other portions of VEC's IRP. I conclude that review and approval of VEC's IRP in phases is warranted due to the urgent safety issues that are addressed by the T&D portion of the IRP and the T&D MOU.

The IRP statute specifically provides that a utility should prioritize safety concerns. The MPR Report, the BPRA, and the SCA all identified serious concerns, including safety concerns, with the physical condition of VEC's system. The T&D portion of VEC's IRP describes VEC's decision-making processes related to, and plans for, addressing these safety concerns. The T&D MOU explicitly addresses VEC's ten-year plan for correcting its T&D system deficiencies. Therefore, I recommend that the Board conclude that it is appropriate to consider the T&D portion of VEC's IRP and the T&D MOU now, rather than wait until the DPS has completed its review of the other portions of VEC's IRP.⁵

In the T&D MOU, VEC and the DPS agree that Board approval of the T&D portion of VEC's IRP would encompass the decision-making processes included in that section of the IRP, but it would not include the specific decision-making tools, analytical methods, or outcomes described in the IRP. This is consistent with the Board's determinations, in dockets involving

4. 30 V.S.A. § 218(c)(a)(1).

5. While normally review of an IRP would require consideration of the entire IRP — otherwise the plan would not be an *integrated* resource plan — I conclude that it is justified to separate out the review of the T&D portion of VEC's IRP given the significant safety concerns regarding VEC's system.

other utilities' integrated resource plans, regarding what Board approval of an IRP means.⁶ For this reason, I am persuaded that the T&D MOU's definition of what Board approval of the T&D portion of VEC's IRP means is reasonable.

VEC's Capital Improvement Plan

VEC has arranged for several independent analyses of its system over the last three years, including the BPRA and the SCA. According to VEC, it incorporated the recommendations of these analyses into its IRP.⁷

The DPS worked closely with VEC and the BPRA's authors during the BPRA's development, and agrees that the BPRA provides VEC with an appropriate framework for addressing its system deficiencies. The DPS also agrees with the recommendations contained in the SCA. Furthermore, the DPS asserts that VEC has developed a reasonable long-term plan to implement the recommendations of the BPRA and the SCA, given the competing forces of under-investment in the system to date and the desire to keep rate increases as reasonable as possible during difficult economic times. However, the DPS has some concern with the challenges facing VEC in managing the proposed increases to its CIP.⁸ To address this concern, the T&D MOU requires VEC to provide an updated CIP annually to the DPS until VEC files its next IRP.

While Board approval of the T&D portion of VEC's IRP does not extend to any of the specific outcomes contained therein, in the T&D MOU VEC and the DPS have asked the Board to approve their agreement regarding VEC's CIP. Specifically, the parties have asked the Board to approve their agreement regarding which projects are included in that plan, and their agreement that VEC shall make all reasonable efforts to complete all those projects within the times shown on Attachment 1 to the T&D MOU.

I am persuaded by the DPS's recommendation regarding VEC's CIP. For over two years the DPS has been closely involved with VEC and the contractors who have analyzed the

6. See, e.g., Docket 6854, Order of 3/9/04, *generally*; Docket 6895, Order of 7/13/06 at 8, 10.

7. Exh. VEC-1 at 4 to 5.

8. Litkovitz pf. at 3-5.

condition of VEC's T&D system. The DPS has also reviewed VEC's financial capabilities in the context of VEC's pending rate request in Docket 7488. For this reason, I am persuaded that the DPS's and VEC's agreement regarding VEC's T&D CIP, as set forth in the T&D MOU, is reasonable. However, the T&D MOU only requires VEC to provide annual updates of its CIP to the DPS. I recommend that the Board require VEC to file its updated CIP with the Board as well as with the DPS. Neither VEC nor the DPS objects to the imposition of such a requirement.⁹

T&D Portion of VEC's IRP

The concerns regarding the physical condition of VEC's T&D system are well-documented. For years, both VEC and the former Citizens Communications Company under-invested in the physical infrastructure of what is now the VEC system.¹⁰ VEC has begun to address the resulting safety concerns, including substation grounding, fencing, signage, and clearances. However, VEC's long maintenance backlog and below-average system condition mean that it will take an extended period of time to address all the identified issues.

As with VEC's CIP, I am persuaded by the DPS's recommendation regarding the T&D portion of VEC's IRP. The DPS has paid close attention to VEC's T&D issues over the last few years, and the DPS is comfortable with VEC's approach to addressing these problems, as set forth in VEC's IRP with the modifications included in the T&D MOU.

In particular, the T&D MOU provides that VEC will develop a vegetative management plan that places VEC's distribution system on a trimming cycle of no greater than eight to ten years. This goes beyond VEC's statement in its IRP that it has a long-term target of attaining a seven to ten-year cycle on distribution rights-of-way, by requiring VEC to develop a plan to achieve such a cycle. I am persuaded that such a modification to VEC's IRP is in the public interest.

However, the MOU provides that VEC will file the vegetative management plan only with the DPS. As with the annual updates to VEC's CIP, I recommend that the Board require

9. Letter from Geoffrey Commons, Special Counsel, DPS, dated July 7, 2009; letter from Victoria J. Brown, Esq., Primmer Piper Eggleston & Cramer, PC, dated July 2, 2009, at 2.

10. In 2004, VEC purchased the Vermont Electric Division of the former Citizens Communications Company.

VEC to file the vegetative management plan with the Board as well as the DPS. Neither VEC nor the DPS objects to the imposition of such a requirement.¹¹

For the reasons set forth above, I am persuaded that the T&D portion of VEC's IRP shows that VEC is engaged in reasonable decision-making processes regarding how to address the deficiencies in the physical condition of its T&D system. Therefore, I recommend that the Board approve the T&D portion of VEC's IRP, as modified by the T&D MOU.

Other T&D MOU Provisions

The T&D MOU provides that the term of VEC's IRP began on July 1, 2008, and will extend through December 1, 2011. Under the terms of the T&D MOU, VEC will file its next IRP on or before December 1, 2011. Historically, Vermont electric utilities have filed IRPs approximately every three years. The proposed filing date for VEC's next IRP is consistent with this practice. Therefore, I recommend that the Board approve it.

V. CONCLUSION

For the reasons set forth above, I recommend that the Board approve the T&D MOU and the T&D portion of VEC's IRP that was filed on July 1, 2008, as modified by the T&D MOU. In addition, I recommend that VEC file its updated CIPs and vegetative management plan with the Board as well as the DPS.

In the T&D MOU, the parties, in accordance with 3 V.S.A. § 811, waived the opportunity to file comments on a Proposal for Decision in this case, provided that the Proposal for Decision was consistent with the T&D MOU. This Proposal for Decision is consistent with the T&D MOU, except for my recommendation that the Board require VEC to file its updated CIPs and vegetative management plan with the Board as well as the DPS. However, the parties have both already stated that they do not object to that recommendation. Therefore, this Proposal for Decision is not adverse to any party, and consistent with the requirements of 3 V.S.A. § 811, has not been circulated to the parties for comment.

11. Letter from Geoffrey Commons, Special Counsel, DPS, dated July 7, 2009; letter from Victoria J. Brown, Esq., Primmer Piper Eggleston & Cramer, PC, dated July 2, 2009, at 2.

Dated at Montpelier, Vermont, this 31st day of July, 2009.

s/ Ann Bishop
Ann Bishop
Hearing Officer

VI. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board ("Board") of the State of Vermont that:

1. The findings and conclusions of the Hearing Officer are adopted.
2. The Memorandum of Understanding between Vermont Electric Cooperative, Inc. ("VEC") and the Vermont Department of Public Service ("DPS") that was filed with the Board on May 15, 2009 ("T&D MOU"), is approved in its entirety.
3. Annually, on or before February 14, until such time as VEC files an updated Integrated Resource Plan ("IRP") with the Board, VEC shall file an updated CIP with the Board and the DPS.
4. On or before September 1, 2009, VEC shall file with the Board and the DPS a vegetative management plan that places VEC's distribution system on a trimming cycle of no greater than eight to ten years.
5. The T&D portion of VEC's July 1, 2008, IRP, as modified by the T&D MOU, is approved.
6. VEC shall file its next IRP on or before December 1, 2011.
7. This docket is remanded to the Hearing Officer for further review of the remaining portions of VEC's IRP.

Dated at Montpelier, Vermont, this 31st day of July, 2009.

<u>s/James Volz</u>)	
)	PUBLIC SERVICE
)	
<u>s/David C. Coen</u>)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: July 31, 2009

ATTEST: s/Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.